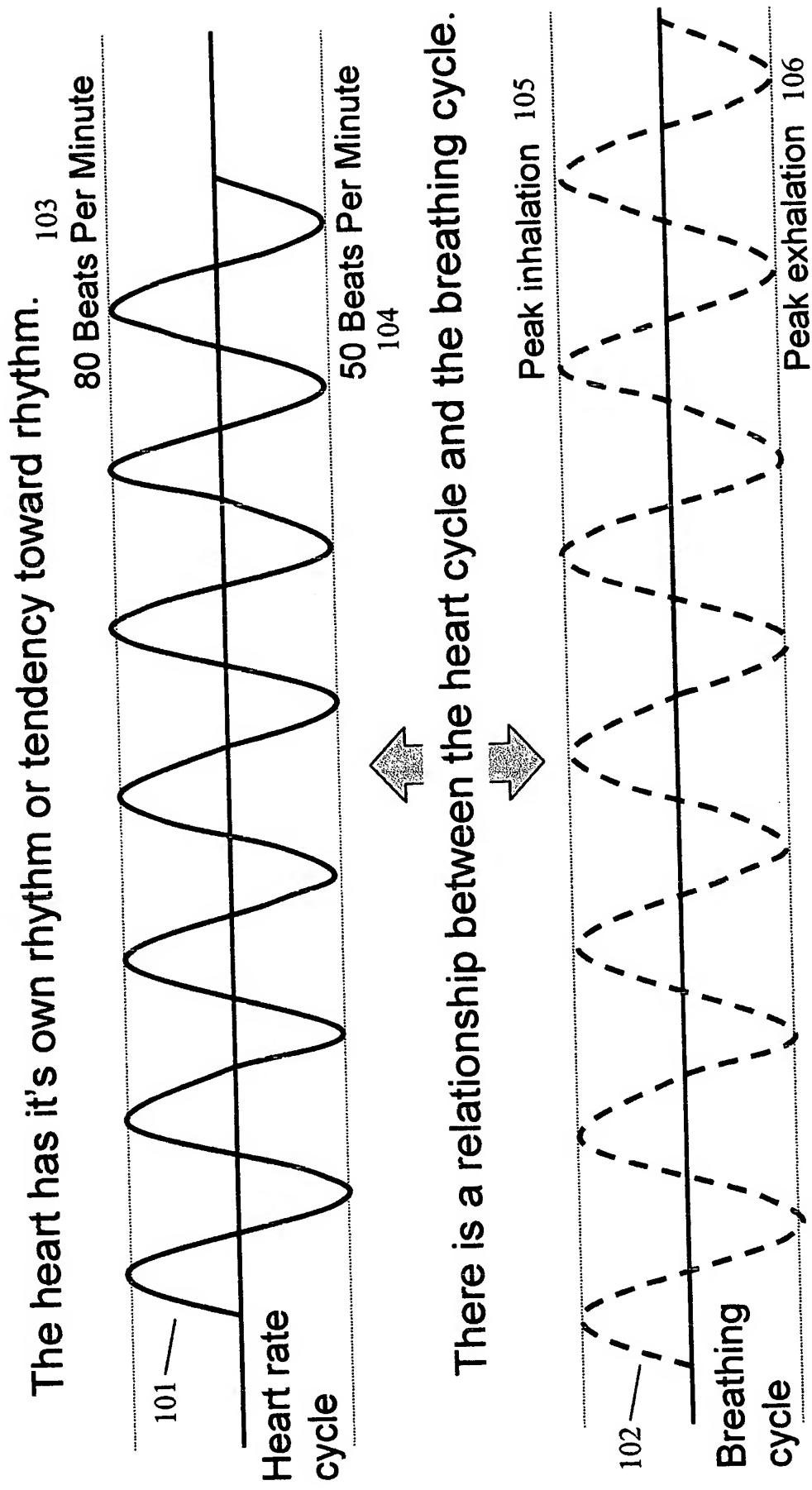


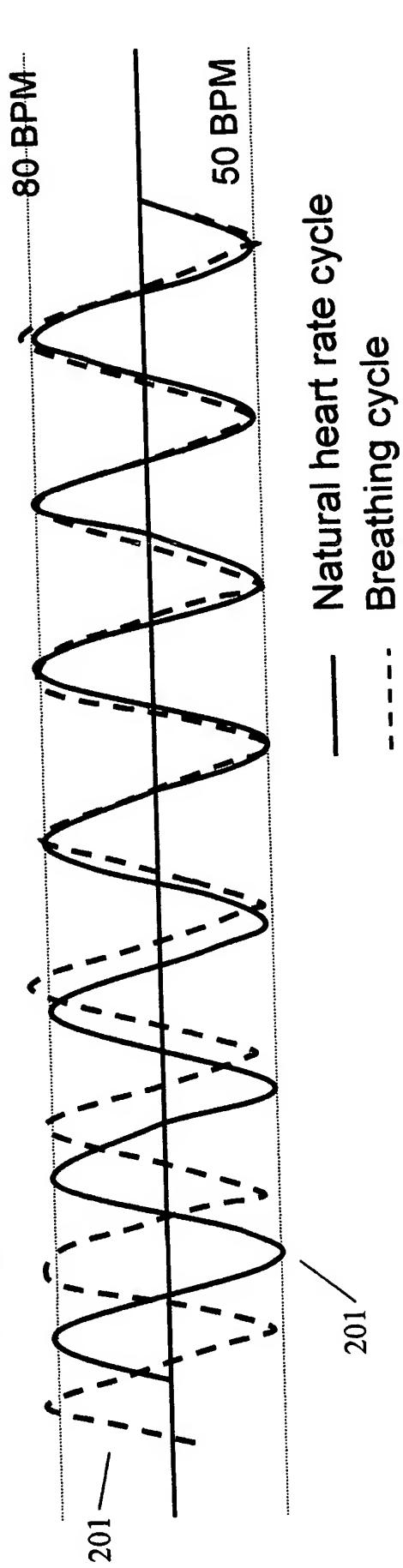
Figure 1



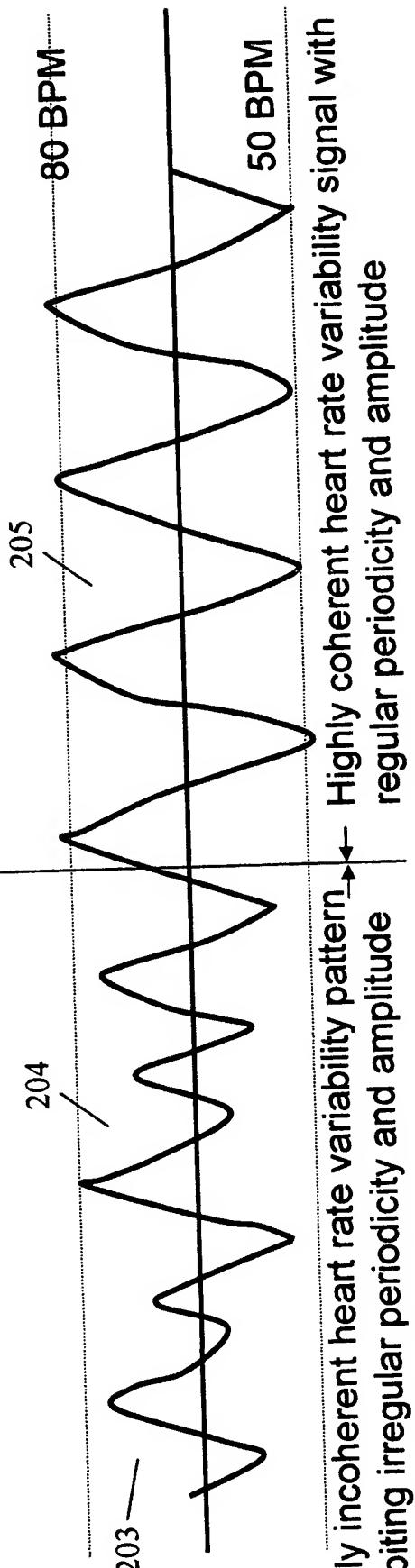
The breathing cycle has a separate but related rhythm. This rhythm can be shorter or longer than the natural heart rhythm and change dramatically with activity, etc.

Figure 2

Depicts the breathing cycle and the natural heart rate cycles moving from misalignment to alignment.



Resultant heart rate variability pattern:



Highly incoherent heart rate variability pattern → Highly coherent heart rate variability signal with regular periodicity and amplitude exhibiting irregular periodicity and amplitude

Figure 3

Depicts heart rate signal and moment of biofeedback signal generation.

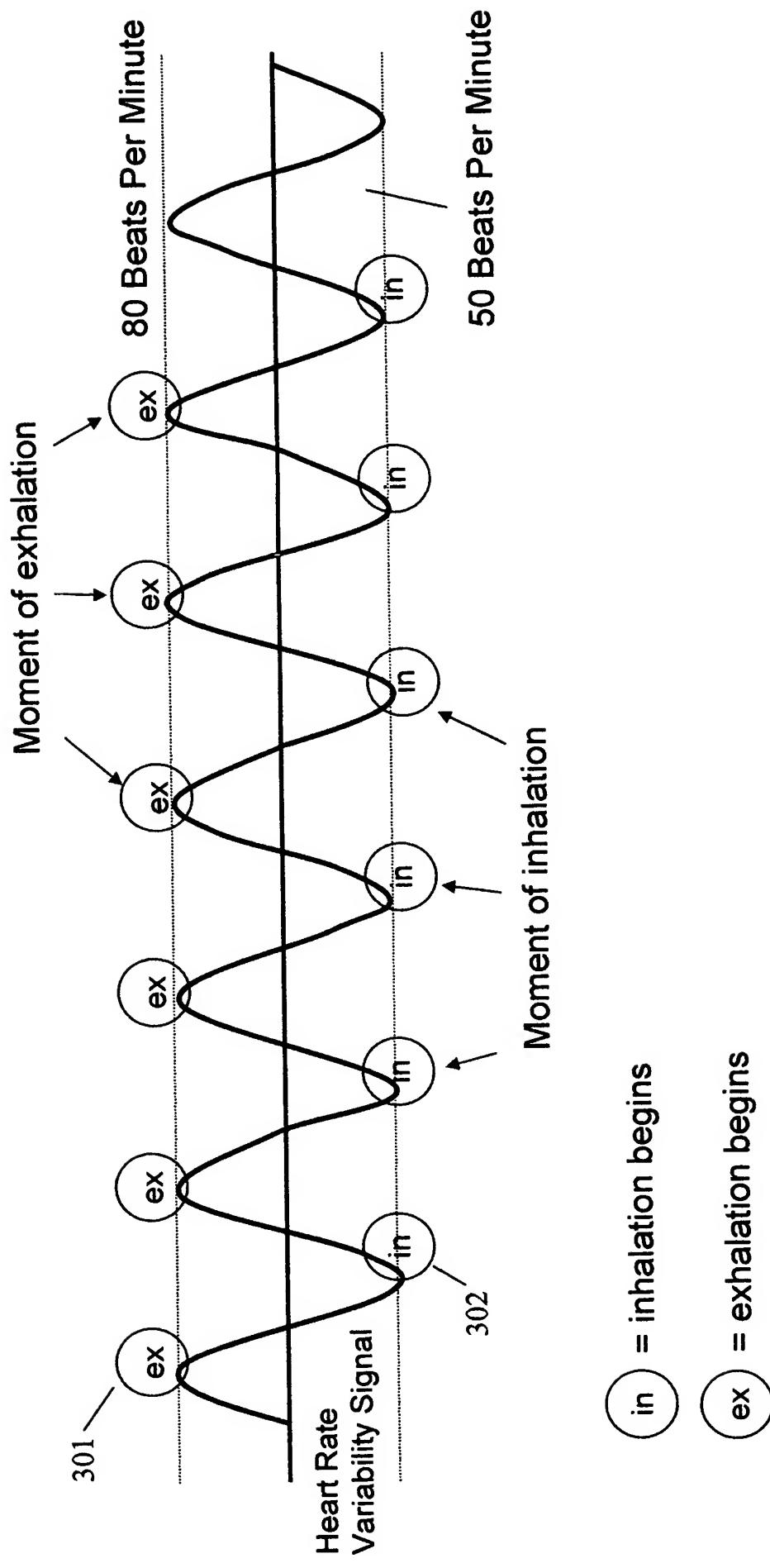
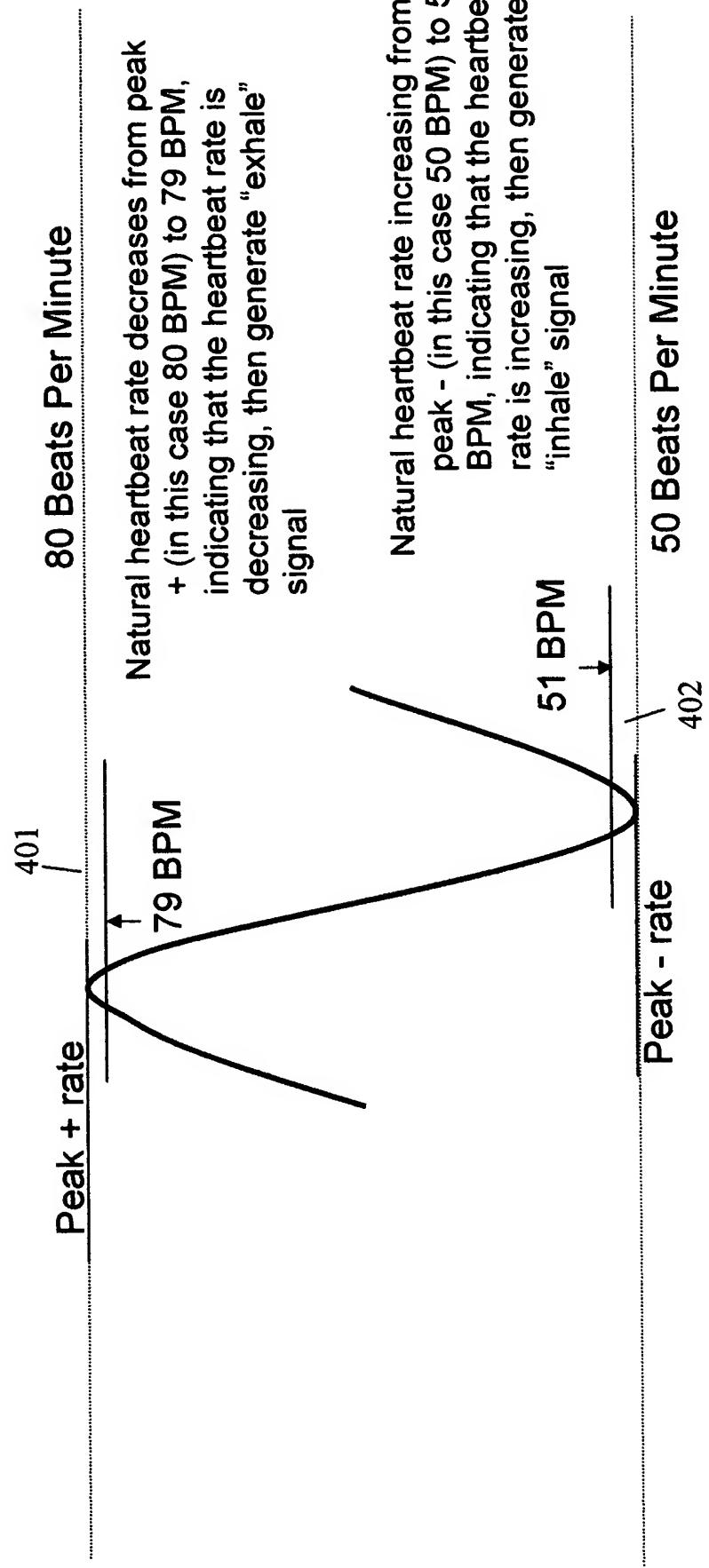


Figure 4

Example of specific criterion for biofeedback signal generation



Generate exhale biofeedback signal = peak positive count (BPM) - 1 BPM

Generate inhale biofeedback signal = peak negative count (BPM) + 1 BPM

Figure 5

Physical system of preferred embodiment

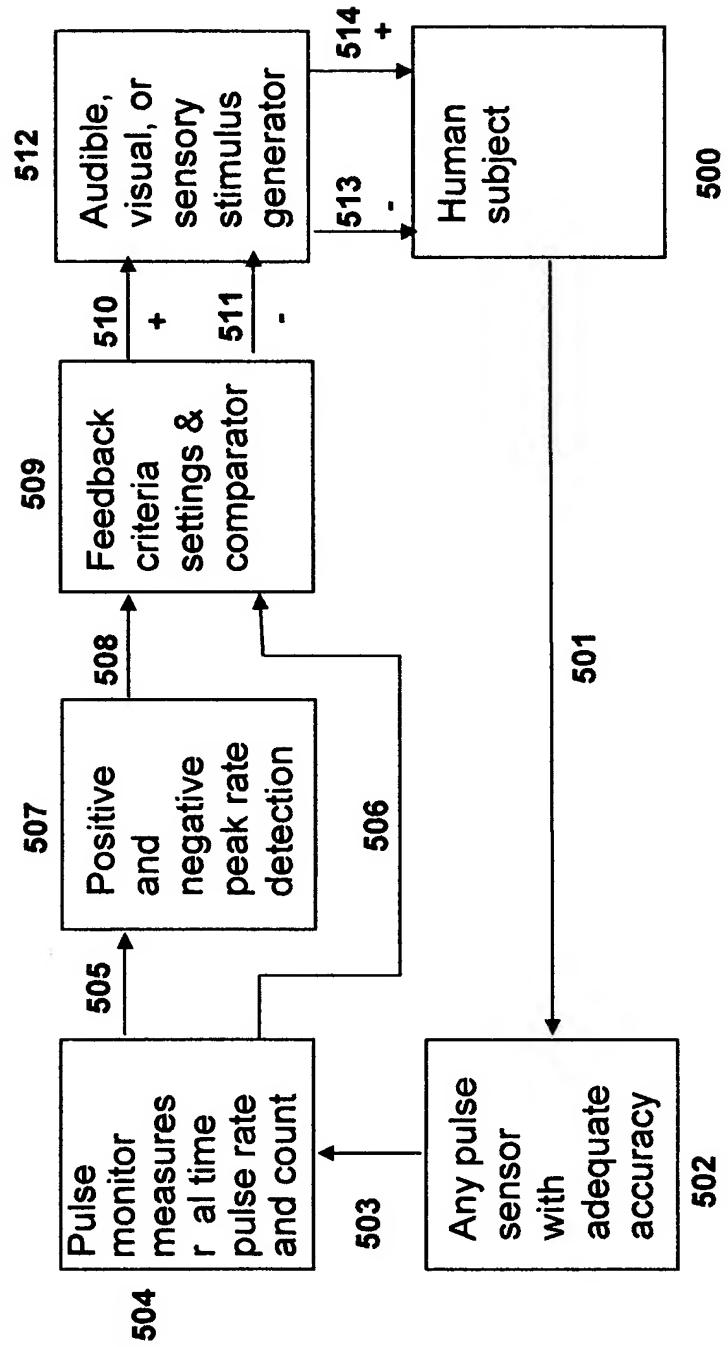


Figure 6
Algorithm of preferred embodiment

